



Highland
RIDGE RV

Recall Campaign

Repair One: 1Hr per slide 9904234

NHTSA#: 15V209

Replace 8 screws per slide

TC#: 2015-160

Repair Two: 2 Hr per slide 9904235

Replace 8 screws per slide AND chain connector only when old screws broke

REQUIRES PARTS TO BE ORDERED FROM Highland Ridge RV for every unit.

Action Required

Replace **ALL** Screws (8 PER SLIDE) currently in place on the Norco Accuslide and
If the original screws are broken, the chain connector bracket must be replaced and the slide adjusted.

Model / Serial Numbers

Part Kit Contents

One Kit per Slide

Note: Kit/s can only be ordered using the order form included with this bulletin.

5/8" x 8-32 machine screws (**DO NOT** substitute any other screws for this recall)
Chain connector bracket assemblies (includes adjuster bolt & jamb nut)

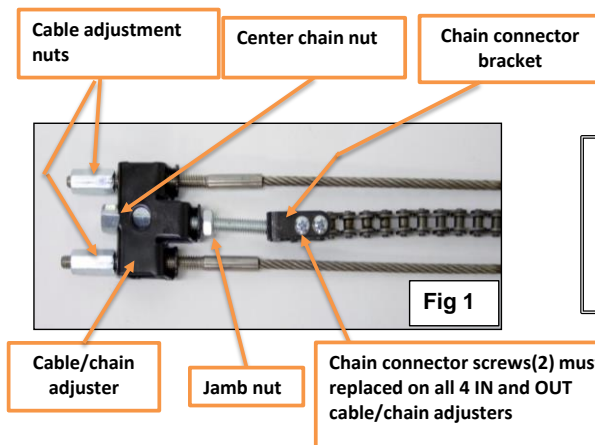
Chain Connector Bracket & Screws



Shop Supplies / Tools

Needle Nose Vice Grips (small pair)
7/16" ratcheting box end / open end wrenches (2)
3/8" ratcheting box end / open end wrench
Drill driver with #2 phillips bit
Small step ladder
Safety glasses
Snug fitting pair of gloves (optional)
Jacks or jackstands to support the slideout

Fig 1: PART DESCRIPTIONS AND LOCATIONS FOR CABLE/CHAIN ADJUSTERS



WARNING!

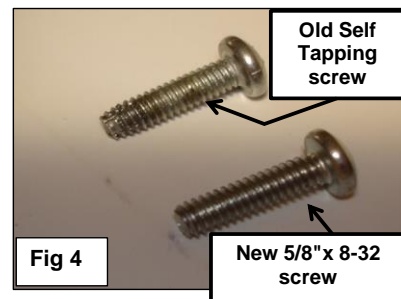
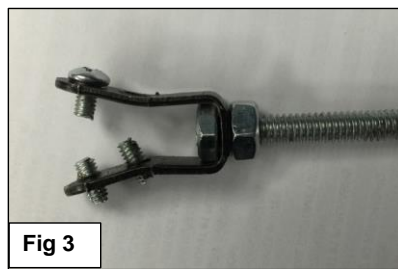
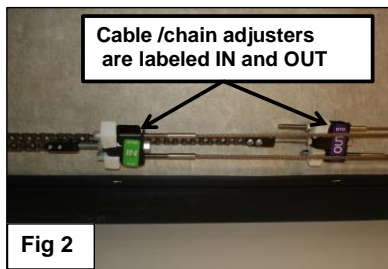
Exercise extreme caution when dealing with the tension on the cables / chains. If nuts are loosened to far or if a screw were to snap the entire assembly can let loose and cause serious injury.

Step

Recall Remedy

- 1. Inside the RV:** Inspect the slideout cables/chains for proper tension **before** moving the slideout. Cables/chains are normally very tight and under tension and should not be loose. If cables are loose, slideout should **NOT** be moved until the cause of the loose cables is found and repaired. If cables/chains are loose, refer to **REPAIR #2: REPLACING CHAIN CONNECTOR BRACKETS & SCREWS.**
- 2.** If cables/chains are tensioned properly, extend the slideout approximately 1/2 way to gain access above it.

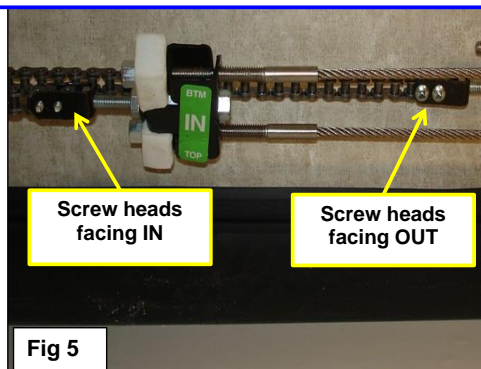
The outside corners of the slideout **MUST** be supported with jacks or jackstands from the ground facing up to the rear wall of the slideout.



3. Inside the RV: (above the slideout and behind the front wood facia)
Fig 2: Inspect the slideout chain connector brackets and screws at all four cable/chain adjusters.
 If none of the machine screws in the chain connector brackets are broken, then only the screws require replacement.
NOTE: Examine the screws carefully, screws can appear normal, but the heads may have broken off.
 Refer to **REPAIR #1: REPLACING SCREWS ONLY (FOR CHAIN CONNECTOR BRACKETS).**
4. If any chain connector bracket has broken screws in it, the chain connector bracket **MUST** be replaced.
 All the chain connector machine screws **MUST** be replaced as well.
Fig 3: Shows screws sheared off in the chain connector bracket.
 Refer to **REPAIR #2: REPLACING CHAIN CONNECTOR BRACKETS AND SCREWS.**
5. **Fig 4:** shows the difference between the old (self tapping style) screws used in the chain connector brackets. and the replacement 5/8" x 8-32 threaded machine screws. (**DO NOT** substitute any other screws for this repair)

REPAIR #1: REPLACING SCREWS ONLY (FOR CHAIN CONNECTOR BRACKETS)

Screw heads **MUST** face opposite directions



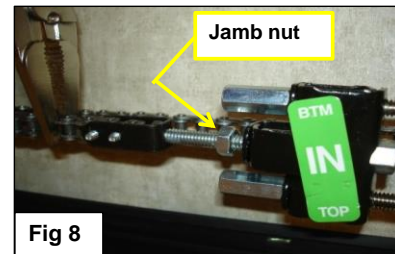
IMPORTANT: Note the orientation of the machine screws in the chain connector brackets (**Fig 5**).

Heads of the screws are oriented such that as the chains pass each other during slideout operation, the heads will pass next to each other. This prevents the screws from getting snagged on each other.

Replacement screws **must** be installed in exactly the same manner as the old screws.

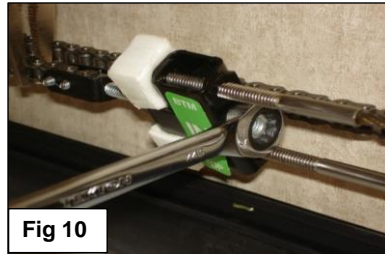
WARNING!

Exercise extreme caution when dealing with the tension on the cables / chains. If nuts are loosened to far or if a screw were to snap the entire assembly can let loose and cause serious injury.



1. **Fig 6: (In this example)** First set of screws to replace have the heads facing away so they must be rotated to access them.
Fig 6: Clamp the vice grips to the chain just behind the chain connector.
Fig 7: Use the 7/16" ratchet wrench and begin loosening the center adjust nut on the cable/chain adjuster.
IMPORTANT: DO NOT LET THE BOLT COME OUT OF THIS NUT. IF IT WERE TO COME OUT TENSION WOULD BE DESTROYED AND THE ENTIRE MECHANISM WOULD REQUIRE RE-TENSIONING.
 Do not let the bolt unscrew any more than about 1/2 way out of the center adjust nut.
NOTE: The square white anti-vibration locks for the cable adjusters are removed for clarity on Fig 8 & 9
 They should remain in place during this procedure.
Fig 8: Note as you turn the center adjust nut, the jamb nut will move out away from the adjuster as the bolt turns.
IMPORTANT: DO NOT TURN THE JAMB NUT. IT MUST REMAIN IN THIS EXACT POSITION ON THE BOLT.

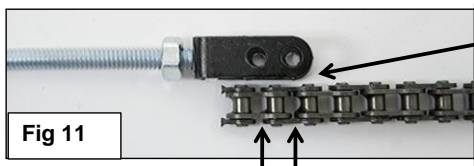
When the center adjust nut is re-tightened, and the bolt turns back into the center adjust nut, the jamb nut will return to its original position thereby eliminating the need to re-tension the entire slideout system.



2. **Fig 9:** With the vice grips, rotate the chain connector bracket toward you so the screws can be removed. Remove one screw using the drill driver & phillips bit and replace it with a new screw. Then repeat for the second screw.
IMPORTANT: DO NOT REMOVE BOTH SCREWS TOGETHER. REPLACE ONE AT A TIME. TENSION ON THE CHAIN WILL BE RELEASED AND INJURY CAN OCCUR.
3. **Fig 10:** Rotate the chain connector back over so the heads of the screws are facing away from you. Make sure screw heads face each other on the pair of chain connectors. Re-tighten the center adjust nut until the jamb nut is back against the cable/chain adjuster. (Once the center adjust nut is re-tightened and the jamb nut is back in place, the jamb nut may be snugged up carefully. **Use 7/16" wrenches on both nuts for this.** (This will lock the jamb nut in place, retaining tension) Unclamp & remove the vice grips.
4. Repeat Steps 1 to 3 for the other three chain connectors and chain / cable adjusters.

REPAIR #2: REPLACING CHAIN CONNECTOR BRACKETS AND SCREWS

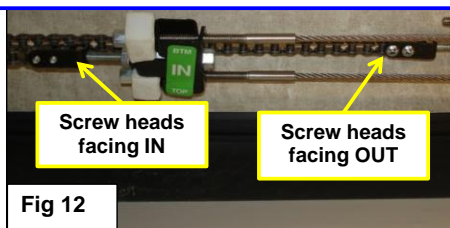
Fig 11: Explains how to attach the chain to the chain connector bracket.



Important: Replacing chain connector both screws must pass through the first and second open chain link.

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Screw heads MUST face opposite directions

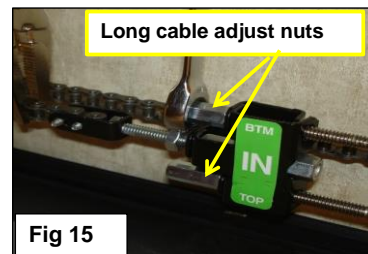
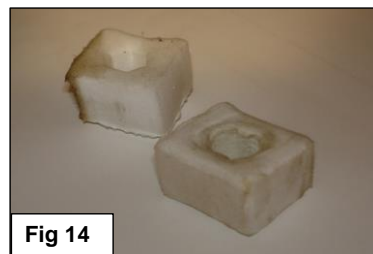


IMPORTANT: Note the orientation of the machine screws in the chain connector brackets (**Fig 12**).

Heads of the screws are oriented such that as the chains pass each other during slideout operation, the heads will pass next to each other. This prevents the screws from getting snagged on each other.

Replacement screws must be installed in exactly the same manner as the old screws.

1. If there are screws sheared off in the chain connector bracket, the chain connector bracket **MUST** be replaced. If chain connector brackets are replaced... a complete re-tensioning of the slideout system is **REQUIRED**.



2. **Fig 13:** Clamp the vice grip pliers on the chain behind the chain connector bracket.
Fig 13: Use the 7/16" ratchet wrench and begin loosening the center adjuster nut. As you turn the nut, the bolt inside will start coming out of the nut, turn the nut until the bolt is about 1/2 way in the nut.
Fig 14: Remove the 2 white anti-vibration locks from the long cable adjuster nuts.
Fig 15: Turn the long cable adjuster nuts until the cables begin to sag and tension is released to the adjuster.

The threaded rod should be about 1/2 way into each of the long adjuster nuts.

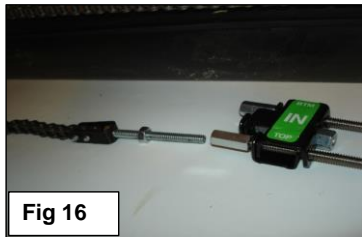


Fig 16



Fig 17



Fig 18

3. **Fig 16:** When tension is release from the assembly, unscrew the large bolt from the center adjuster nut.
Fig 17: Install the chain into a new connector bracket as shown. (Refer also to **Fig 11** at the beginning of these instructions)
The machine screws will go through the first two gaps in the end of the chain.
Tighten the screws with the drill driver & phillips bit. Make them snug but **DO NOT TORQUE THEM**.
Fig 18: Thread the large bolt back into the center adjuster nut. Make sure the jamb nut is screwed onto the bolt.
Begin tightening the center adjuster nut until the bolt is about 1/2 way into the nut.
Make sure the chain connector screw heads are facing each other (**Fig 12**).

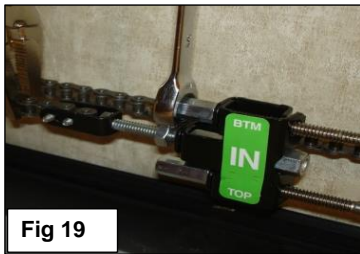


Fig 19

4. **Fig 19:** Use the 3/8" ratchet wrench to begin tightening the long cable adjuster nuts to bring some tension back to the cables.
Once tension is back on the cables again leave that assembly as it is and adjust the next cable/chain adjuster blocks.
5. **IMPORTANT: Since tension was completely released on the cables & chains when replacing the chain connector bracket(s) the entire system must be re-tensioned again according to specific instructions supplied by Norco.**
Cable / chain adjusters (labeled IN and OUT) must to be parallel with the wall.
Screw heads on chain connector brackets must face towards each other (**Fig 12**)
Unclamp & remove the vice grips.
6. Tensioning instructions are available from Norco, contact:
Tim Belle (574 612 2808) or HenryMcCormick (574 596 2779) for specific instructions & information explaining this re-tensioning procedure for the cable/chain adjusters.